

**IT IS THE VENDOR'S RESPONSIBILITY TO CHECK FOR  
ADDENDUMS PRIOR TO SUBMITTING PROPOSALS**

**NOTICE TO BIDDERS  
SPECIFICATION NO. 01-208**

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid  
for:

**ANNUAL REQUIREMENTS FOR  
TIRE CHAINS**

**MEETING OR EXCEEDING THE CITY OF LINCOLN'S  
SPECIFICATIONS ATTACHED**

Sealed bids will be received by the City of Lincoln, Nebraska on or before 12:00 noon  
Wednesday, October 31, 2001 in the office of the Purchasing Agent, Suite 200, K Street  
Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be  
publicly opened and read at the K Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission  
of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division,  
prior to the time and date specified above.

# INSTRUCTIONS TO BIDDERS

## CITY OF LINCOLN, NEBRASKA PURCHASING DIVISION

### **1. BIDDING PROCEDURE**

- 1.1 Bidder shall submit two (2) complete sets of the bid documents and all supporting material. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidder shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document.
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Each bid must be legibly printed in ink or by typewriter, include the full name, business address, and telephone number of the bidder; and be signed in ink by the bidder.
- 1.5 A bid by a firm or organization other than a corporation must include the name and address of each member.
- 1.6 A bid by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.7 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.8 Bids received after the time and date established for receiving bids will be rejected.

### **2. BIDDER'S SECURITY**

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated of the Proposal Form.
- 2.2 If alternate bids are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
  - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
  - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
  - 2.5.1 A contract has been executed and bonds have been furnished.
  - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
  - 2.5.3 All bids have been rejected.

- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:

- 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
- 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

### **3. EQUAL OPPORTUNITY**

- 3.1 Each bidder agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age, or marital status. Bidder shall fully comply with the provisions of Chapter 11.08 of the Lincoln Municipal Code.
- 3.2 Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16).
- 3.3 The Equal Opportunity Officer will determine compliance or non-compliance with the City's Affirmative Action Policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

### **4. DATA PRIVACY**

- 4.1 Bidder agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 4.2 The bidder agrees to hold the City harmless from any claims resulting from the bidder's unlawful disclosure or use of private or confidential information.

### **5. BIDDER'S REPRESENTATION**

- 5.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 5.2 Each bidder for services further represents that the bidder is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

### **6. INDEPENDENT PRICE DETERMINATION**

- 6.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening

directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

## **7. CLARIFICATION OF SPECIFICATION DOCUMENTS**

- 7.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 7.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to the date and time for receipt of bids.
- 7.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 7.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

## **8. ADDENDA**

- 8.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 8.2 Addenda will be mailed or delivered to all who are known by the City to have received a complete set of specification documents.
- 8.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 8.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 8.5 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

## **9. BRAND NAMES**

- 9.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 9.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 9.3 Bids for alternate items shall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.

- 9.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

## **10. DEMONSTRATIONS/SAMPLES**

- 10.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 10.2 Such demonstration can be at the City delivery location or a surrounding community.
- 10.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate City personnel to the nearest location to view and inspect proposed item(s).
- 10.4 If items are small and malleable, and the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

## **11. DELIVERY**

- 11.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise. Time required for delivery is hereby made an essential element of the bid.
- 11.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 11.3 All bids shall be based upon **inside** delivery of the equipment or merchandise F.O.B. the City at the location specified by the City, with all transportation charges paid.

## **12. WARRANTIES, GUARANTEES AND MAINTENANCE**

- 12.1 Copies of the following documents must accompany the bid proposal for all items being bid:
  - 12.1.1 Manufacturer's warranties and/or guarantees.
  - 12.1.2 Bidder's maintenance policies and associated costs.
- 12.2 As a minimum requirement of the City, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.
- 12.3 Bidder Warrants and represents to the City that all software/firmware/ hardware/equipment /systems developed, distributed, installed or programmed by Bidder pursuant to this Specification and Agreement.
  - 12.3.1 That all date recognition and processing by the software/firmware/hardware/equipment/system will include the four-digit-year format and will correctly recognize and process the date of February 29, and any related data, during Leap years; and
  - 12.3.2 That all date sorting by the software /firmware/hardware/ equipment/system that includes a "year category" shall be done based on the four-digit-year format. Upon being notified in writing by the City of the failure of any

software/ firmware/ hardware /equipment /systems to comply with this Specification and Agreement, Contractor will, within 60 days and at no cost to the City, replace or correct the non-complying software/ firmware/ hardware/ equipment/ systems with software/firmware/ hardware/equipment/ systems that does comply with this Specification and Agreement.

- 12.3.3 No Disclaimers: The warranties and representations set forth in this section 12.3 shall not be subject to any disclaimer or exclusion of warranties or to any limitations of Licensor's liability under this Specification and Agreement.

### **13. ACCEPTANCE OF MATERIAL**

- 13.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 13.2 Material delivered under this proposal shall remain the property of the bidder until:
- 13.2.1 A physical inspection and actual usage of this material is made and found to be acceptable to the City; and
- 13.2.2 Material is determined to be in full compliance with the specifications and accepted proposal.
- 13.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the City reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 13.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the specification documents or purchase orders.
- 13.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

### **14. BID EVALUATION AND AWARD**

- 14.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 14.2 No bid shall be modified or withdrawn for a period of sixty (60) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 14.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.

- 14.4 The bid will be awarded to the lowest responsive, responsible bidder whose proposal will be most advantageous to the City, and as the City deems will best serve their requirements.

- 14.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, by groups, or "lump sum"; to waive irregularities and technicalities in bids; such as shall best serve the requirements and interests of the City.

### **15. INDEMNIFICATION**

- 15.1 The bidder shall indemnify and hold harmless the City, its members, its officers and employees from and against all claims, damages, losses, and expenses, including, but not limited to attorney's fees arising out of or resulting from the performance of the contract, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property other than goods, materials and equipment furnished under this contract) including the loss or use resulting therefrom; is caused in whole or part by any negligent act or omission of the bidder, any subcontractor, or anyone directly or indirectly employed by any one of them or anyone for whose acts made by any of them may be liable, regardless of whether or not it is caused by a party indemnified hereunder.
- 15.2 In any and all claims against the City or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 15.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

### **16. TERMS OF PAYMENT**

- 16.1 Unless other specification provisions state otherwise, payment in full will be made by the City within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

### **17. LAWS**

- 17.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.

# **SPECIAL PROVISIONS FOR COMMODITY TERM CONTRACTS**

## **CITY OF LINCOLN, NEBRASKA PURCHASING DIVISION**

### **1. ESTIMATED QUANTITIES**

- 1.1 The quantities set forth in the specification document are approximate and represent the estimated requirements of the City for the contract period.
- 1.2 Items listed may or may not be inclusive of City requirements for this category.
- 1.3 Category items not listed, but distributed by bidder are to be referred to as kindred items. Kindred items shall receive the same percentage of discount or pricing structure as items listed in the specification document.
- 1.4 The unit prices and the extended total prices shall be used only as a basis for the evaluation of bids. The actual quantity of materials necessary may be more or less than the estimates listed in the specification document, but the City shall be neither obligated nor limited to any specified amount. The City will, if possible, restrict increases/decreases to 20% of the estimated quantities listed in the specification document.

### **2. CONTRACT PERIOD**

- 2.1 The material shall be delivered as ordered during the contract period, beginning from the date of contract and ending one (1) year from that date, or as otherwise indicated on the proposal form.
- 2.2 The City is interested in a one (1) year contract, with the option to renew for additional one (1) year periods, not to exceed three (3) such renewals. Bidder must indicate on the proposal form if extension renewals are an option. By mutual consent of both parties it is understood and agreed that the contract may be renewed only at the same prices and/or under the same conditions governing the original contract; and any request for an increase in price or a change in the contract conditions shall be interpreted as a request not to renew the contract at the end of the current contract period.

### **3. BID PRICES**

- 3.1 Bidders must state on the proposal form if the bid prices will remain firm for the full contract period; or if the bid prices will be subject to escalation/de-escalation.
- 3.2 Escalation/De-escalation Clause: In the event that prevailing market conditions warrant an adjustment in bid prices contained in the contract, the following escalation/de-escalation clause shall be the only clause applicable or acceptable to the City:
  1. Contractor shall give written notice to the Purchasing Agent of any proposed changes from contract prices not less than thirty (30) calendar days prior to the effective date of said price changes.
  2. Such notice must be accompanied by a certified copy of the supplier's advisory or notification to the contractor of price changes.
  3. No price escalation will be authorized in excess of the amount of the increase referred to on the supplier's notice.
  4. The approved price change shall be honored for all orders received by the contractor after the effective date of such price change.

5. Approved price changes are not applicable to orders already issued and in process at time of price change.
6. The City reserves the right to audit and/or examine any pertinent books, documents, papers, records or invoices relating directly to the contract transaction in question after reasonable notice and during normal business hours.
7. The Purchasing Agent retains the right to determine whether or not such proposed price changes are in the best interests of the City.
8. If in the opinion of the Purchasing Agent any proposed increase is found unacceptable, the Purchasing Agent reserves the right to cancel the contract upon thirty (30) calendar days written notice.
9. Contractors must tie any price change clause to an industry-wide or otherwise nationally recognized index, or some other form of verifiable document. Contractor will put the Purchasing Agent on the mailing lists for such publication so that the Purchasing Agent can monitor said changes. Such membership will be at no cost to the City.

### **4. CONTRACT AWARD NOTIFICATION**

- 4.1 The Purchasing Division will issue a Contract Award Notification to all successful bidders. Such contract award notification will incorporate the City's specifications, and may incorporate the bidder's specifications.
- 4.2 No action need be taken by the contractors at time of receipt of such Contract Award Notification.
- 4.3 Orders for materials will be made as needed by the various City Departments.

### **5. QUARTERLY REPORT**

- 5.1 The contractor shall provide to the Purchasing Agent a quarterly report, showing all purchases made under the terms and conditions of the contract.
- 5.2 Such quarterly report shall itemize the following information:
  1. Each ordering department.
  2. Items and quantities purchased by department.
  3. Total dollar amount of purchases by department.

**SPECIFICATIONS  
FOR  
TIRE CHAINS**

1. SCOPE

- 1.1 This specification covers ladder type chain assemblies designed for use on tires that have been manufactured in accordance with the standards of the Tire & Rim Association, Inc., 3200 West Market St., Akron, Ohio 44313. All dual tire chains specified herein are designed for use on dual tires mounted in accordance with specifications covering their center to center spacing as outlined by the NACM Chain Clearance Charts. Oversized tires, snow tires, special service, or special traction tires, etc., may require chains of a larger size or of a size not specified herein.
- 1.2 Classification. Tire chains described in this specification shall be of the following types as specified:

Reinforced Tire Chains

Type RP - Reinforced Passenger Car Chains  
Type RS - Reinforced Single Truck Chains  
Type RDT - Reinforced Dual-Triple Truck Chains

Regular Tire Chains

Type P - Passenger Car Chains  
Type PL - Passenger Car Chains - Restricted Clearances  
Type SH - Single Truck Chains  
Type SM - Single Truck Chains - Mud Service  
Type DTH - Dual-Triple Truck Chains  
Type DTM - Dual-Triple Truck Chains - Mud Service  
Type DH - Dual and Wide-Base Truck Chains  
Type OTR - Off-the-Road Vehicle Chains  
Type FTH - Farm Tractor Chains - Highway Service

2. APPLICABLE DOCUMENTS

- 2.1 The following documents, of the issue in effect on date of manufacture, form a part of this specification to the extent specified herein:

SPECIFICATIONS

NACM

TC SHEETS TC1-01 TO TC4-01 - NACM Tire Chain Specification Sheets

STANDARDS

ASTM

ASTM E18-74 - Standard Method for Rockwell Hardness Test

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

SAE

SAE Recommended Practice J1232 - Traction Device Profile Determination & Classification

3. DEFINITIONS

- 3.1 For purposes of this specification the following definitions shall apply.
- 3.2 Side Chain. Straight link, welded chain of specified length to complete one full circumference along the tire side wall.

- 3.3 Fastener. Any suitable connecting device, secured to one end of a side chain, so constructed that it can be easily closed (engaged or fastened) and be readily opened (released) by hand.
- 3.4 Cross Chain.
- 3.4.1 Reinforced. Twist link, welded chain, carburized with one or more reinforcements per link consisting of a lug, or lugs, electrically welded to all links except the end links in such a manner as to provide increased traction and additional resistance to abrasive wear. Cross chains shall be of the specified length and shall provide ample drape over the tire tread.
- 3.4.2 Regular. Twist link, welded chain, carburized, without reinforcements. Cross chains shall be of the specified length and shall provide ample drape over the tire tread.
- 3.5 Cross Chain Hooks. Any suitable hook used to attach each cross chain to the side chains. Hooks shall be constructed and assembled to prevent accidental detachment.
- 3.6 Pitch. The measured inside length of a chain component (bearing point to bearing point when in use).

#### 4. REQUIREMENTS

- 4.1 Components. Tire chain assemblies shall consist of two side chains, or two outer- and one inner-side chain, with cross chains, cross chain hooks, and fasteners necessary to form a complete assembly in accordance with the NACM TC SHEETS specified herein (see 2.1).
- 4.2 Material. All side and cross chains and cross chain hooks shall be made of open hearth, electric furnace, or basic oxygen process steel.
- 4.3 Spacing of Cross Chains. The number of cross chains required per half pair of chains shall be in accordance with the applicable NACM TC SHEETS. The first cross chain shall be attached to that link of each side chain nearest the fastener that will permit the fastener to lie in the proper plane when the assembled tire chain is applied to the tire. On single tire chains the remainder of the cross chains shall be attached to the side chains at equal intervals of four links each. On dual-triple tire chains the remainder of the cross chains shall be attached to the outer side chains at equal intervals of four links each, and to the inner side chain with opposing cross chains staggered at equal intervals of two links each.
- 4.4 Tolerances
- 4.4.1 Cross Chain Length. The inside length of all cross chains, including hooks held in the same plane, shall be within a tolerance of minus six percent to plus three percent of the specified length on applicable TC sheets. The length shall be measured by hanging the cross chain vertically on a horizontal pin and measuring the inside-to-inside length. The number of links in a cross chain may vary from the specified number by plus or minus one link.
- 4.4.2 Side Chain Length. The inside length of all side chains including fasteners shall not be less than the minimum length as specified on the applicable TC SHEETS. The length shall be measured by hanging the side chain vertically from a horizontal pin on its closed fastener and measuring from the pin contact surface to the inside surface of the last side chain link. If the variance of the cross chain length is in the range of minus six percent to minus three percent, the specified side chain length shall be increased by the amount of the variance x 3.14.
- 4.4.3 Wire and Rod Sizes. Wire and rod sizes shall be subject to the following tolerances:
- Material up to and including .192" (4.88mm) diameter - plus or minus .003" (.08 mm).
- Material over .192" (4.88mm) diameter - plus or minus .016" (.41mm).

- 4.5 Component Dimensions. The tire chain component dimensions, used for design purposes by the NACM, are shown in Table I. The dimensions of manufactured components may vary but the assembled tire chains must meet the tolerances specified in paragraphs 4.4.1, 4.4.2, and 4.4.3.

TABLE 1  
NACM TIRE CHAIN DESIGN COMPONENT DIMENSIONS

<u>Type Component</u>	<u>Wire Dia.</u>	<u>Nominal</u>		<u>Pitch</u>	
		<u>in.</u>	<u>mm</u>	<u>in.</u>	<u>mm</u>
SIDE CHAIN	.162	4.11		1.250	31.75
SIDE CHAIN	.177	4.50		1.250	31.75
SIDE CHAIN	.192	4.88		1.296	32.92
SIDE CHAIN	.218S	5.54		1.343	34.11
SIDE CHAIN	.218L	5.54		1.390	35.31
SIDE CHAIN	.281S	7.14		1.734	44.04
SIDE CHAIN	.281L	7.14		1.812	46.02
SIDE CHAIN	.312S	7.92		1.843	46.81
SIDE CHAIN	.312L	7.92		1.921	48.79
SIDE CHAIN	.375	9.53		2.172	55.17
SIDE CHAIN	.437	11.10		2.250	57.15
CROSS CHAIN	.177	4.50		1.180	29.97
CROSS CHAIN	.207	5.26		.920	23.37
CROSS CHAIN	.234	5.94		1.000	25.40
CROSS CHAIN	.281	7.14		1.250	31.75
CROSS CHAIN	.312	7.92		1.090	27.69
(Regular)					
CROSS CHAIN	.312	7.92		1.390	35.31
(Reinforced)					
CROSS CHAIN	.344	8.74		1.230	31.24
CROSS CHAIN	.375	9.53		1.260	32.00
CROSS CHAIN	.437	11.10		1.562	39.67
CROSS CHAIN	.531	13.49		1.734	44.04
C. C. HOOK	.177	4.50		1.06	26.92
C. C. HOOK	.207	5.26		1.87	47.50
C. C. HOOK	.250	6.35		1.56	39.62
C. C. HOOK	.312	7.92		1.56	39.62
C. C. HOOK	.375	9.53		1.75	44.45
C. C. HOOK	.406	10.31		1.75	44.45
C. C. HOOK	.437	11.10		2.37	60.20

- 4.6 Finish. Type RP, P and PL shall have a rust resistant finish for protection in transit and storage. All other types shall be finished in accordance with individual manufacturer's practice.

4.7 Physical Properties.

- 4.7.1 Hardness. The surface hardness of cross chain shall be determined in accordance with ASTM E18-74 Standard Test Methods for Rockwell Hardness and shall meet one of the following levels of measurement: RC 53 min., RA 77.5 min., R15N 87 min., R30N 71 min., R45N 58.5 min.
- 4.7.2 Case Depth. The case depth of cross chain shall be as specified in Table II.



Table II  
Case Depth of Cross Chain Links

<u>Wire Dia.</u>	Nominal		<u>Total Case Depth</u>			
	<u>Minimum</u>		<u>Maximum</u>			
	<u>in.</u>	<u>mm</u>	<u>in.</u>	<u>mm</u>	<u>in.</u>	<u>mm</u>
.177		4.50	.010	.25	.042	1.07
.207		5.26	.012	.30	.045	1.14
.234		5.94	.016	.41	.046	1.17
.281		7.14	.020	.51	.050	1.27
.312		7.92	.022	.56	.052	1.32
.375		9.53	.027	.69	.060	1.52
.437		11.10	.027	.69	.065	1.65
.531		13.49	.027	.69	.065	1.65

4.7.3 Workmanship. Workmanship shall be such as to produce chain assemblies free from scale, injurious defects such as burrs or sharp edges, and faulty welding.

5. QUALITY PROVISIONS

5.1 Responsibility for Inspection. Unless otherwise specified, the supplier is responsible for all inspection and testing specified herein.

5.2 Quality Conformance-Inspection.

5.2.1 Lot Formation. A lot shall consist of all chains of one type, from an identifiable production period, submitted at one time for quality conformance inspection.

5.2.2 Sampling for Examination and Testing. Samples for quality conformance examination and testing shall be selected in accordance with inspection level S-3 of MIL-STD-105.

5.2.3 Acceptable Quality Level. Each sample selected in accordance with 5.2.2 shall be examined and tested for conformance to an acceptable quality level (AQL) of 6.5 based on percent defective.

5.2.4 Defects. For examination and testing purposes, defects shall be classified as any characteristic which does not meet the requirements specified herein.

5.3 Test Procedures.

5.3.1 Hardness. To determine conformance to 4.7.1, cross chain shall be subject to the Rockwell hardness test as specified in the ASTM E18-74 Standard Test Methods for Rockwell Hardness.

5.3.2 Case Depth. To determine conformance to 4.7.2, a link of the cross chain shall be prepared by grinding on a suitable abrasive wheel one cross section perpendicular to the axis of the chain wire. The test specimen shall be etched in a solution of one part chemically pure nitric acid and one part water by volume (specific gravity 1.217). Specimen shall be etched for six seconds. Width of dark ring revealed shall be measured microscopically at suitable magnification and recorded as depth of case.

6. NOTES

- 6.1 Intended Use. Tire chain assemblies covered by this specification are intended for use on passenger car tires, truck tires (single, dual and wide base), off-the-road service tires, and farm tractor tires. Replacement cross chains are intended for repairing tire chain assemblies.
- 6.2 Ordering Data. Orders should specify the following:
  - 6.2.1 Title, number, and date of this specification.
  - 6.2.2 Type of chain assembly (see 1.2).
  - 6.2.3 Tire size for chain assemblies (see NACM TC SHEETS).
  - 6.2.4 Quantity of tire chain assemblies or cross chains required.

PROPOSAL FORM  
SPECIFICATION NO. 01-208

BID OPENING TIME: 12:00 NOON  
DATE: Wednesday, October 31, 2001

The undersigned bidder, having full knowledge of the requirements of the City of Lincoln for the below listed items and the contract documents (which include Notice to Bidders, Instructions to Bidders, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to sell to the City the below listed items for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for unit prices listed below.

**THE SEASONAL REQUIREMENTS FOR:**  
**TIRE CHAINS**

See Attached Bidding Schedule

Bidder must check here if contract extension renewal is an option:  
Yes\_\_\_\_\_, No\_\_\_\_\_

TERM PRICE CLAUSE: BIDDER MUST STATE:

- (a) Bid prices firm for the full contract period: \_\_\_\_\_; or  
(b) Bid prices subject to escalation/de-escalation\_\_\_\_\_.  
If (b), state period for which prices will be firm:  
through:\_\_\_\_\_.

BID SECURITY REQUIRED: No XX

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City/County, and to enter into a contract if this proposal is accepted.

**NOTE:**

**RETURN 2 COMPLETE COPIES OF PROPOSAL AND SUPPORTING MATERIAL.**  
**MARK OUTSIDE OF BID ENVELOPE AS FOLLOWS:**  
**SEALED BID FOR SPEC. 01-208**

\_\_\_\_\_  
COMPANY NAME

\_\_\_\_\_  
BY (Signature)

\_\_\_\_\_  
STREET ADDRESS or P.O. BOX

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
CITY, STATE ZIP CODE

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
TELEPHONE

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
EMPLOYER'S FEDERAL I.D. NO.  
OR SOCIAL SECURITY NUMBER

\_\_\_\_\_  
ESTIMATED DELIVERY DAYS

\_\_\_\_\_  
TERMS OF PAYMENT

BIDS MAY BE INSPECTED IN THE PURCHASING DIVISION OFFICES DURING NORMAL BUSINESS HOURS, AFTER TABULATION BY THE PURCHASING AGENT. IF YOU DESIRE A COPY OF THE BID TABULATION TO BE MAILED TO YOU, YOU MUST ENCLOSE A SELF-ADDRESSED STAMPED ENVELOPE WITH YOUR BIDDING DOCUMENTS.

Company Name\_\_\_\_\_

**BIDDING SCHEDULE  
SPECIFICATION NO. 01-208  
TIRE CHAINS**

**THE SEASONAL REQUIREMENTS FOR: TIRE CHAINS**

Mfg. of Tire Chains Being Bid\_\_\_\_\_

Price List No.\_\_\_\_\_ Dated\_\_\_\_\_ Discount Offered\_\_\_\_\_%

Item No.	Usage Pair	Tire Size	Cross Chain	Side Chain	Design	Approx. Wt. Per Pair	Delivered Price	
							Per Pair	Per Pair
1.	46	18.4 x 38	9/0 (3/8)	7/0 (5/16)	(F.T.H.) Swivelloyd	225 lb.	\$_____	\$_____
2.	12	18.3 x 34	9/0 (3/8)	7/0 (5/16)	Swivelloyd	210 lb.	\$_____	\$_____
3.	2	16.9 x 38	9/0 (3/8)	7/0 (5/16)	Swivelloyd	147 lb.	\$_____	\$_____
4.	4	20.8 x 38	9/0 (3/8)	7/0 (5/16)	Swivelloyd	240 lb.	\$_____	\$_____
5.	12	13.00 x 24	9/0 (3/8)	7/0 (5/16)	(O.T.R.) Swivelloyd	110 lb.	\$_____	\$_____
6.	4	14.00 x 24	9/0 (3/8)	7/0 (5/16)	Swivelloyd	140 lb.	\$_____	\$_____
7.	35	10.00 x 20	9/0 (3/8)	7/0 (5/16)	Swivelloyd	55 lb.	\$_____	\$_____
8.	30	P235 x 75R15	9/0 (1/4)	9/0 (1/4)	(S.H.) (Type P)	25 lb.	\$_____	\$_____
9.	20	P225 x 70HP15	10/0 (1/4)	9/0 (1/4)	(Type RP)	24 lb.	\$_____	\$_____
10.	20	P205 x 75HR14	10/0 (1/4)	9/0 (1/4)	(Type RP)	24 lb.	\$_____	\$_____
11.	30	P205 x 75R14	9/0 (1/4)	9/0 (1/4)	(Type P)	16 lb.	\$_____	\$_____
12.	20	P215 x 70HR15	10/0 (1/4)	9/0 (1/4)	(Type RP)	24 lb.	\$_____	\$_____
13.	20	P185 x 75R14	9/0 (1/4)	9/0 (1/4)	(Type P)	16 lb.	\$_____	\$_____
14.	10	23.850 x 12	9/0 (1/4)	9/0 (1/4)	(Type P)	7 lb.	\$_____	\$_____
Total Estimated Contract Price, Items 1 through 14, Combined							\$_____	